## USN

## Third Semester MBA Degree Examination, Dec.2015/Jan.2016 Security Analysis and Portfolio Management

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FOUR questions from Q.No. 1 to Q.No. 7. 2. Question No. 8 is compulsory.

1 a. What are the three concepts of Investments?

(03 Marks)

b. Discuss the sources of Information.

(07 Marks)

c. Describe the various investment avenues available to Investors in India.

(10 Marks)

2 a. What is meant by underwriting?

(03 Marks)

b. Explain the assumptions of Markowitz model.

(07 Marks)

c. The following data is available for a bond:

Face value	Rs 100			
Years to maturity	4 years			
Coupon rate	9%			
Market price	Rs 90			

What is the yield to Maturity, Duration and Volatility of this bond?

(10 Marks)

3 a. What is Stop loss order?

(03 Marks)

b. What are the functions of stock exchanges?

(07 Marks)

c. Following data gives the market return and the Mukesh pharma company's scrip return for a particular period:

Index Return (R <sub>m</sub> )	Scrip Return (R <sub>i</sub> )
0.50	0.30
0.60	0.60
0.50	0.40
0.60	0.50
0.80	0.60
0.50	0.30
0.80	0.70
0.40	0.50
0.70	0.60

- i) What is the beta value of Mukesh having company scrip?
- ii) If the Market return is 2, what would be the scrip return?

(10 Marks)

4 a. What do you mean by risk?

(03 Marks)

b. Elucidate the types of risk an investor will face.

(07 Marks)

- c. Discuss the key industry factors that need to be studied in fundamental analysis. (10 Marks)
- 5 a. What are the basic assumptions of CAPM?

(03 Marks)

b. The equity share of a company offers a current dividend of Rs 4.00 per share. The rate of dividend is expected to grow at 6% for the first five years and 8% thereafter. The rate of return required by an investor is 15%. Find the intrinsic value of the equity share. (07 Marks)

c. The returns on securities A & B under five possible situations are given below:

Situations	Probability	Return on security	Return on security
1	0.10	-10%	5%
2	0.30	15%	12%
3	0.30	18%	19%
4	0.20	22%	15%
5	0.10	27%	12%

Compute covariance between the returns of security A & B.

(10 Marks)

6 a. What is the Relative strength index?

- (03 Marks)
- b. Discuss random walk model approach to equity investment decision.

(07 Marks)

c. Calculate the 5 day EMA for the data given below:

(10 Marks)

Day	1	2	3	4	5	6	7	. 8	9	10
Closing price (Rs)	90	95	94	96	100	98	96	95	97	100

7 a. What is Efficient Market?

(03 Marks)

- b. From the data given below:
  - i) Find out the securities that are overpriced and underpriced.
  - ii) Find out the portfolio return and port folio beta by assuming that the portfolio constructed by using equal proposition.

iii) What would be the expected risk and return if this portfolio was managed at 50% with the cost of borrowing at 9%? (07 Marks)

Security	A	В	C	D	Е	F	Nifty Index	T - Bills
E(R)	0.33	0.13	0.26	0.12	0.21	0.14	0.13	0.09
β	1.7	1.4	1.1	0.95	1.05	0.70	1.00	0
δ	0.50	0.35	0.40	0.24	0.28	0.18	0.20	0

c. The following information is provided regarding the performance of the funds, namely Birla Advantage, Sundaram Growth and Sun F and C value, for a period of 6 months ending August 2014. R<sub>f</sub> is 9%. Rank them with the help of sharpe Index and Treynov Index.

(10 Marks)

Funds	$R_{\rm p}$	$\delta_{p}$	β
Birla Advantage	25.38	4.00	0.23
Sundaram Growth	25.11	9.01	0.56
Sun F and C Value	25.01	3.55	0.59

## **8** CASE STUDY:

Stocks X and Y display the following returns over the past three years

Year	Return (%)				
	X	Y			
2009	14	12			
2010	12	18			

a. What is the expected return on portfolio made up of 40% of X and 60% of Y? (05 Marks)

b. What is the standard deviation of each stock?

(05 Marks)

c. Determine the correlation co-efficient of stock 'X' and stock 'Y'.

(05 Marks)

d. What is the portfolio risk of a portfolio made up of 40% 'X' and 60% of 'Y'?

(05 Marks)